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## (54) IMPROVEMENTS IN OR RELATING TO LABELS

(71) We, NORPRINT LIMITED, a British Company of Horncastle Road, Boston, Lincolnshire, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed to be particularly described in and by the following statement:—

The present invention relates to labels. According to the present invention, there is provided a label comprising sheet material divided by two substantially parallel lines of weakness into a central portion and two end portions, one at each side of the central portion, a surface of each of the end portions carrying an adhesive, and an edge portion of the label being notched such that a respective notch leads into each line of weakness.

An embodiment of the invention will now be described, by way of example only, with reference to the accompanying diagrammatic drawing, the sole figure of which is a plan of a backing strip mounting a series of labels in accordance with the invention.

As shown in the drawing, labels 2 are arranged in two parallel rows along a paper or other backing strip 4; the longitudinal edges of the strip 4 are formed with apertures 6 for engagement by mechanical feed means of a computerised labelling/stock-taking system. The strip 4 is divided by a longitudinal row of perforations 8 extending between the two rows of labels and by transverse rows of perforations 10 extending across the strip between adjacent labels 2.

Each label 2 is of elongate rectangular form and is arranged on the strip 4 with its longitudinal axis extending transversely of the strip 4. Lines of weakness in the form of a pair of parallel transverse perforations 12 divide each label 2 into a central portion 14 and a pair of opposed end portions 16. The under-surface of each end portions 16 is coated with a pressure-sensitive adhesive which acts to secure the label, as a whole, to the strip 4, the strip 4 having a silicone or other coating which will allow the label to

be peeled cleanly from the strip. An aperture 18 is formed in a corner portion at one longitudinal edge of the central portion 14 for registration purposes and/or to enable the label 2 to be used as a tag once it has been detached from the backing strip 4.

To facilitate removal of the central portion 14 of the label 2 from the end portions 16, the corner portions at the other longitudinal edge of the central portions 14 are removed to form, together with a part of the respective end portion 16, generally V-shaped notches 20 which lead into the first perforation of the transverse perforations in the label; in other words, the first perforation opens into the notch. The outer edge of each notch 20 is aligned with the corresponding row of perforations 12 and the inner edge is inclined thereto.

Suitably, each transverse perforation in the labels 2 is about  $3/32''$  in length and is spaced from an adjacent perforation by about  $1/16''$ , the depth of the V-shaped notch from the adjacent longitudinal edge is  $1/4''$ , and the inner edge of the notch is inclined to the outer edge by an angle of about  $45^\circ$ . The label 2 is formed from a paper suitable for optical scanning.

In use, the labels 2 on the strip 4 are printed with stock information from a computer-operated printer and the strip 4 is divided longitudinally along the row of perforations 8, the divided strip 4 being fed to a fully automatic label applicator, for example a photo-electrically operated applicator. In the applicator, each label 2 is applied to an individual item of stock to which it is secured by the adhesively coated end portions 16.

When the item has been sold, the central portion 14 of the label 2 is removed from the item by an arm which slides beneath the flap formed between the notches 20 at the relevant longitudinal edge of the central portion 14 and which draws the central portion 14 so that it is separated from the end portions along the transverse perforations 12 in the label 2. The removed central portion 14

is fed to an optical reader to provide indicia of the current stock situation of the particular item.

WHAT WE CLAIM IS:—

- 5 1. A label comprising sheet material divided by two substantially parallel lines of weakness into a central portion and two end portions, one at each side of the central portion, a surface of each of the end portions carrying an adhesive, and an edge portion  
10 of the label being notched such that a respective notch leads into each line of weakness.
- 15 2. A label as claimed in claim 1, wherein each line of weakness is in the form of a line of perforations.
- 20 3. A label as claimed in claim 2, wherein in each line of perforations, the perforation immediately adjacent to the said edge portion opens into the notch.
- 25 4. A label as claimed in any one of the preceding claims, wherein each said notch is generally V-shaped and is formed in the central portion of the label, one side of each notch being aligned with the associated line of weakness.

5. A label as claimed in any one of the preceding claims wherein the said adhesive is a pressure-sensitive adhesive.

6. A strip of labels comprising a backing strip, and a plurality of labels as claimed in claim 5 attached to the surface of the strip by means of the said adhesive, the said surface of the strip being such that the labels can be peeled from the strip, and the said labels being arranged in a row along the strip. 30 35

7. A label substantially as hereinbefore described with reference to the accompanying drawing. 40

8. A strip of labels substantially as hereinbefore described with reference to the accompanying drawing.

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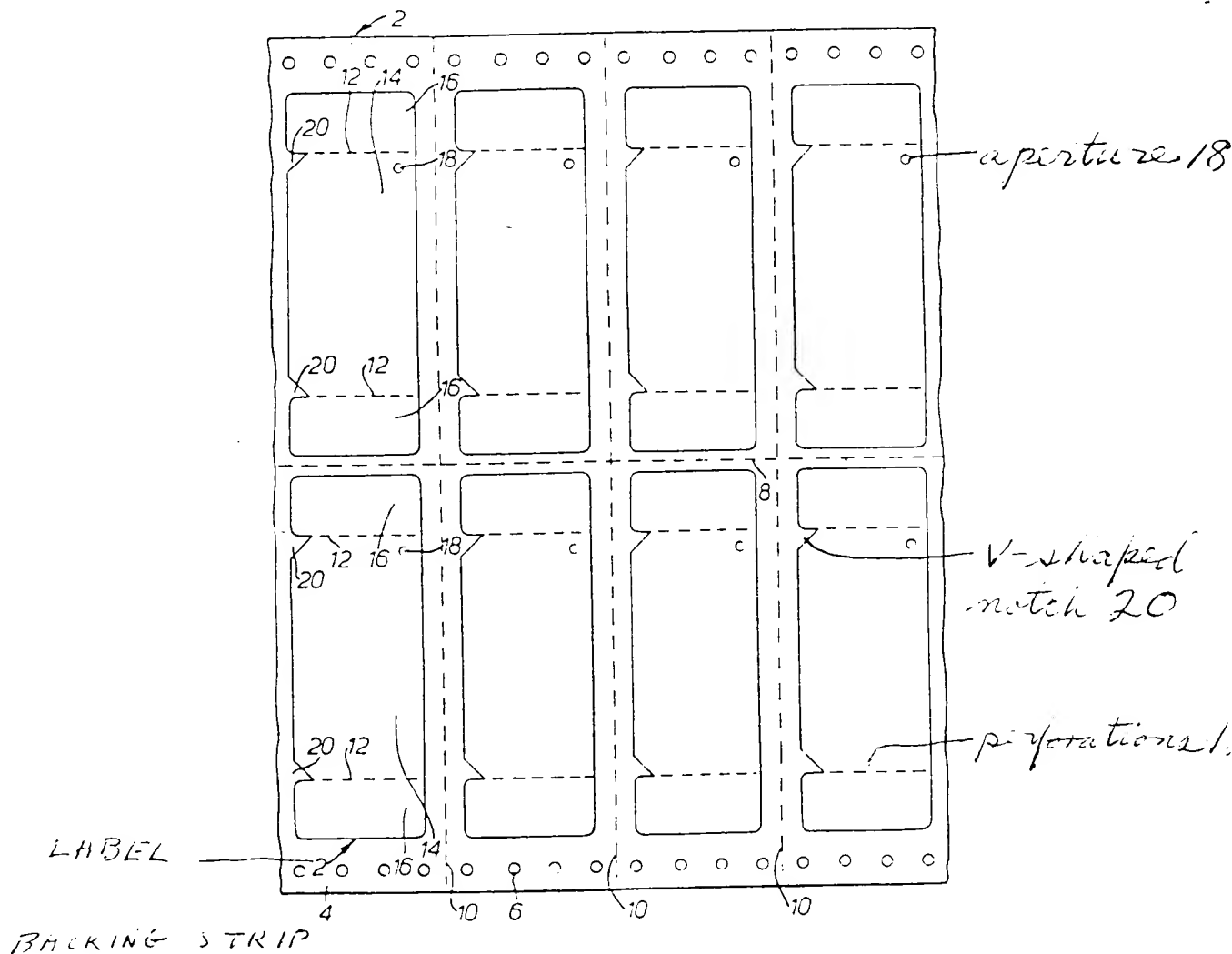
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COMPLETE SPECIFICATION

1 SHEET

This drawing is a reproduction of  
the Original on a reduced scale

INVENTOR FRANK PILBOROUGH



computer operated printer p.l. 78+79

microne p.l. 47

Tag p.l. 53